

Dave Heineman, Governor

**TO:** Nebraska Funeral Directors

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## RE: ELECTRONIC DEATH CERTIFICATE REPORTING OF INFLUENZA-RELATED DEATHS

**DATE:** October 28, 2010

The DHHS Division of Public Health Office of Epidemiology conducts statewide surveillance to monitor communicable diseases that affect Nebraska residents and outcomes associated with illnesses such as hospitalizations and deaths. We then use this information to make recommendations to better control or prevent diseases in the population. To enhance our ability to detect disease-related deaths in a timely manner, our office is now receiving daily reports of death data provided by Vital Statistics, the office within our agency that processes death certificates. If you currently use the Electronic Death Registration System (EDRS) system, thank you for your continued efforts. If you don't currently use EDRS, I strongly encourage you to consider using this system to enhance the timeliness of reporting deaths particularly now that EDRS system data has been integrated into existing influenza surveillance systems.

As you might know, a field was added to the EDRS data entry screen which allows you to report, often within hours of the time of death, if you have knowledge to indicate *if a death is in anyway related to influenza*. This field contains the following wording: *Influenza Related Death?* (*Y*,*N*,*U*). When providing a response please enter Y for yes, N for no, or U for unknown. When collecting fact of death (FOD) information, please do your best to determine if influenza in anyway contributed to the decedents demise and indicate as such accordingly using EDRS in a timely fashion. It is important to note that influenza can be a contributing factor to many other causes of death such as pneumonia. In such cases, please provide a yes response even though influenza might not be the primary cause of death. The usefulness of this novel surveillance tool to identify influenza-related deaths holds promise to allow unprecedented, near real-time reporting, a substantial improvement compared with existing mechanisms. To obtain meaningful and useful data, we are dependent upon your and your peers' ability to accurately obtain this critical

information from next-of-kin, medical professionals, or others who might have knowledge regarding cause of death. In so doing, you become a critical partner in Nebraska's public health system and we thank you for your substantial contributions. Beginning on 11/1/2010, EDRS funeral establishments will see this field which will be activated as ordered by the Director of Public Health during the influenza season.

If you are not actively using or not currently authorized to use the EDRS system, please consider the use of EDRS for reporting all deaths to maximize the public health uses of this system. To learn more about EDRS please visit the EDRS website (http://www.dhhs.ne.gov/edrs/) and call the Vital Records training coordinator at 402-471-0919 to establish an account.

## 2009 Influenza Season Results

Of 11,598 deaths filed in Nebraska during July 19, 2009 to May 1, 2010, registration for a total of 7,354 (63.4%) were initiated electronically via EDRS for which FOD notice and data were available a median of 10 days sooner than paper-based (Table 1). Among the deaths registered via EDRS, 31 (0.4%) were reportedly influenza-associated. The remaining 7,323 (99.6%) were classified as "no," "unknown," or had missing data. Active surveillance identified 21 influenza-associated deaths that met the case definition. Of these, 16 (76.2%) were initiated electronically and were included in the analysis; approximately half being reported by funeral directors as influenza-associated (sensitivity, 43.8%). Overall, few false positives as a proportion of all deaths (specificity, 99.7%) were reported.

Table 1. Time interval in days from date of death to date when death registration was initiated.

Initiation method	N	Mean (days)	Median (days)	Range (days)
Electronic	7,354	2.0	1.0	0–113
Paper-based	4,244	13.8	11.0	1–221

Nebraska's EDRS substantially enhances timeliness of FOD data availability. Although sensitivity and positive predictive value were limited, disease-specific death notification by funeral directors via EDRS holds promise as an early detection tool for emergent public health problems such as influenza-associated mortality. Additional training and refinement are needed to improve utility. Further study is needed to evaluate its utility during future influenza seasons when heightened public awareness attributable to 2009–2010 pandemic H1N1 has waned, and for mortality surveillance applied to other public health conditions.

Thank-you for your continued contributions to public health in Nebraska.